

AGILENT TECHNOLOGIES, INC.
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Intellectual Property Administration
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Lowland, Colorado 80537-0599

PATENT APPLICATION

ATTORNEY DOCKET NO. 10030539-1

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Heumann et al.

Serial No.: 10/714,321

Examiner:

Filing Date: 11/15/03

Group Art Unit:

Title: HIGHLY CONSTRAINED TOMOGRAPHY FOR AUTOMATED INSPECTION OF AREA ARRAYS

COMMISSIONER FOR PATENTS
PO Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ (X) under 37 CFR 1.97(b), or
(Within three months of filing national application; or date of entry of national application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ () under 37 CFR 1.97(c) together with either a:
 - ☐ () Statement under 37 CFR 1.97(e), or
 - ☐ () a \$180.00 Processing fee under 37 CFR 1.17(p), or
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ () under 37 CFR 1.97 (d) together with a:
 - ☐ () Statement under 37 CFR 1.97(e), and
 - ☐ () a \$180.00 processing fee under 37 CFR 1.17(p).
(Filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee)

Please charge to Deposit Account **50-1078** the sum of \$0.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **50-1078** pursuant to 37 CFR 1.25.

☒ (X) Applicant(s) submit herewith Form PTO 1449. References identified with an asterisk (*) were disclosed in Patent Application No. _____ filed _____, now U. S. Patent No. _____, and, as such, copies thereof are not included pursuant to the provisions of 37 CFR 1.98(d).

☐ () A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individuals(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

Date of Deposit: **1/9/04**

Typed Name: **Jessica Costa**

Signature: Jessica Costa

Respectfully submitted,

Heumann et al.

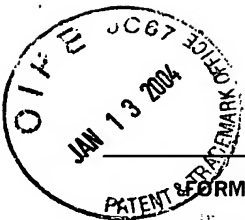
By Jessica Costa

Jessica Costa

Attorney/Agent for Applicant(s)

Reg. No. **41,065**

Date: **1/9/04**

**PATENT APPLICATION**

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FORM PTO-1449

**LIST OF PATENTS AND PUBLICATIONS FOR
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STATEMENT**

(Use several sheets if necessary)

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GROUP

REFERENCE DESIGNATION**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	*	DOCUMENT NUMBER	DATE	NAME
		6,002,739	12-14-1999	Heumann
		6,201,850	3-13-2001	Heumann
		4,926,452	5-15-1990	Baker et al.
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		5,259,012	11-2-1993	Baker et al.

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		DOCUMENT NUMBER	DATE	NAME	TRANSLATIO	
					YES	NO

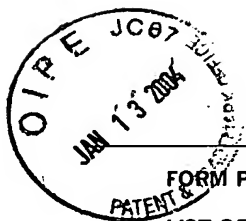
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	A. Louis and F. Natterer, "Mathematical Problems of Computerized Tomography", Proc. IEEE 71:379-389 (1983)
	K. Hanson and G. Wecksung, "Bayesian Approach to Limited-angle Reconstruction in Computed Tomography", J. Optimal. Sci. Am. 73:1501-1509 (1983)
	S. Geman and D. McClure, "Bayesian Image Analysis: An Application to Single Photon Emission Tomography", Proc. Statist. Comput. Sect. Amer. Stat. Soc. Washington, D.C., paragraph. 12-18 (1985)

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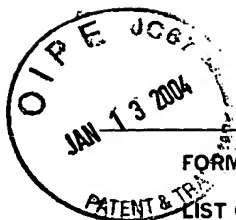
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	T. Hebert and R. Leah, "A Generalized EM Algorithm for 3-D Bayesian Reconstruction From Poisson Data Using Gibbs Priors", IEEE Trans. on Medical Imaging 8:194-202 (1989)
	P.J. Green, "Bayesian Reconstruction From Emission Tomography Data Using A Modified EM Algorithm", IEEE Trans. on Medical Imaging 9:84-93 (1990)
	K. Sauer and C.A. Bouman, "A Local Update Strategy For Iterative Reconstruction From Projections", IEEE Trans. On Signal Processing 41:534-548 (1993)

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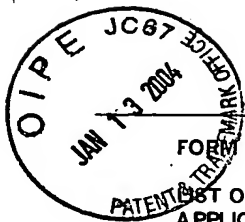
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	B. Ohnesorge, T. Flohr, K. Klingensbeck-Regn, "Efficient Object Scatter Correction Algorithm For Third and Fourth Generation CT Scanners", Eur. Radiol. 9, 563-569 (1999)
	T. Freese, C. Bourman, and K. Sauer, "Multiscale Bayesian Methods for Discrete Tomography", Discrete Tomography: Foundations, Algorithms, and Applications, edited by G. Herman and A. Kuba, Birkhauser Boston, Cambridge, MA, pp. 237-261 (1999)

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	C. Fox and G. Nicholls, "Exact MAP States and Expectations from Perfect Sampling: Grieg, Porteous, and Scheult Revisited", in Bayesian Inference and Maximum Entropy Methods in Science and Engineering, edited by A. Djafari, AIP Conference Proceedings, 568:252-263 (2001)
	J. Lui and C. Sabatti, "Generalised Gibbs sampler and multigrid Monte Carlo for Bayesian computation", Biometrika 87:353-369 (2000)

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